“The Devil is in the Details”

November Follow-up on the Winter Outlook for 2011-2012

By Mike Huston

Very little has changed since the October news release advertising another La Niña winter for 2011-2012. La Niña conditions remain present across the Equatorial Pacific Ocean and are expected to continue throughout the Northern Hemisphere winter. The abnormally cool sea surface temperatures and resulting weather circulations are expected to produce cooler than normal temperatures across a broad area of the western and northern tier states and an above normal probability of precipitation across a sizeable portion of the northwest region this winter (see Figures 1 and 2, respectively). With the bountiful 2010-2011 water year and La Niña still fresh in everyone’s mind, I wanted to ensure that our expectations for the winter of 2011-2012 were grounded in reality.

Behind many of the graphics that we use to highlight the seasonal forecasts, there can be a number of details left unattended. One example applicable to La Niña based forecasts is composite graphics. Composite graphics are averages of observational data divided into individual subgroups which are geographically referenced. So for instance, if I wanted to know what the average precipitation accumulation distribution looked like across Idaho during La Niña winters, I would examine a composite graphic like Figure 3. This particular graphic depicts precipitation anomalies or deviations from average of the precipitation accumulation across the contiguous United States. One might note the striking similarity between Figure 2 and Figure 3 where the latter generally serves as a starting point in the formulation of the seasonal forecast. A second observation is that it appears that La Niña winters in Idaho are generally wetter than normal. It is at this point that those “unattended details” help to form a more *complete* picture of La Niña winters in Idaho.

Figure 4 is a depiction of the frequency of occurrence of the precipitation anomalies observed in Figure 3. For instance, in the Idaho panhandle where the precipitation anomalies are strikingly high, the frequency of occurrence is 60 to 80 percent. This indicates that a fairly robust and dependable higher than average precipitation impact can be expected throughout the Idaho panhandle region during La Niña winters. Conversely, in extreme southeast Idaho where precipitation anomalies are moderately strong, the frequency of occurrence only ranges from 20 to 50 percent. The picture here is somewhat tepid due to the large degree of variability observed from one La Niña winter to the next.

Updated national outlooks are issued on the third Thursday of each month at:

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/.

For now, the most prudent action one could take is to approach winter armed with the expectations suggestive of a developing La Niña while remaining prepared for the variability that will surely accompany the winter weather of 2011-2012.

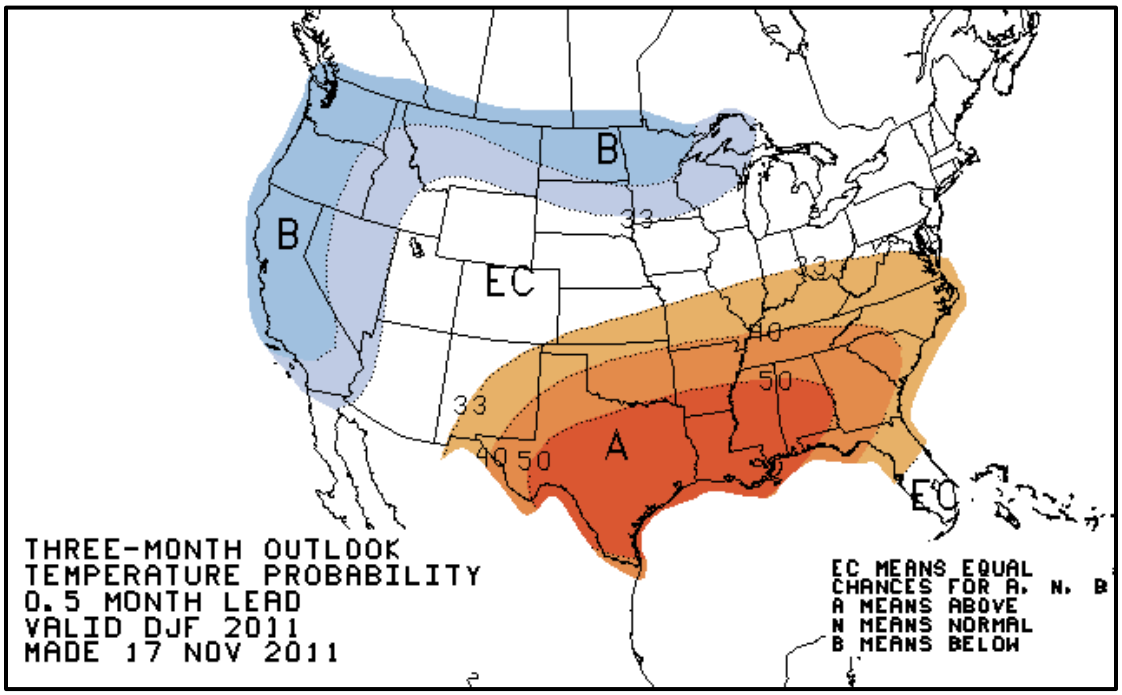

Figure 1. Three-Month Temperature Outlook for December, January and February.

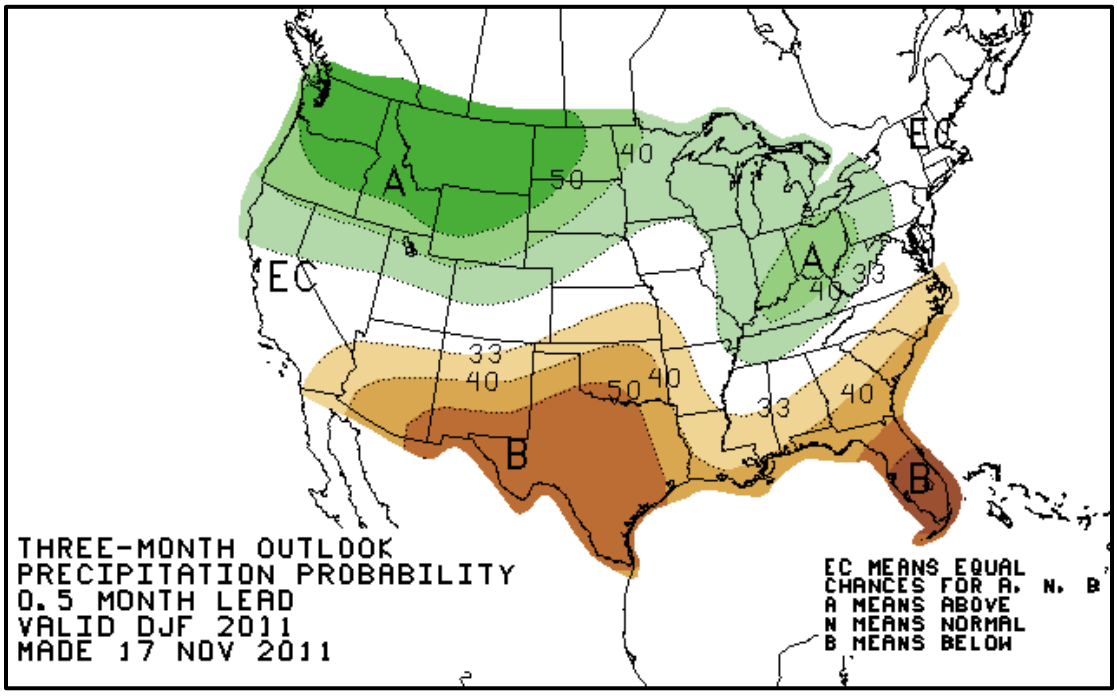

Figure 2. Three-Month Precipitation Outlook for December, January and February.

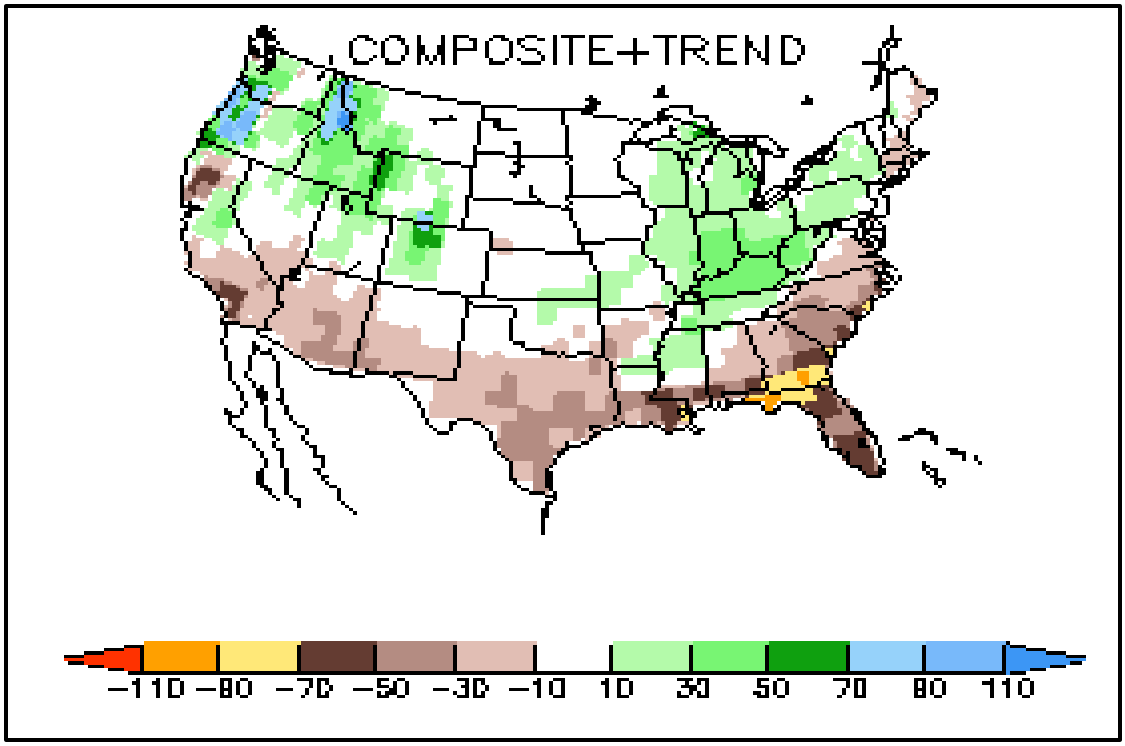

Figure 3. La Niña Precipitation Anomaly (MM) for December-February.

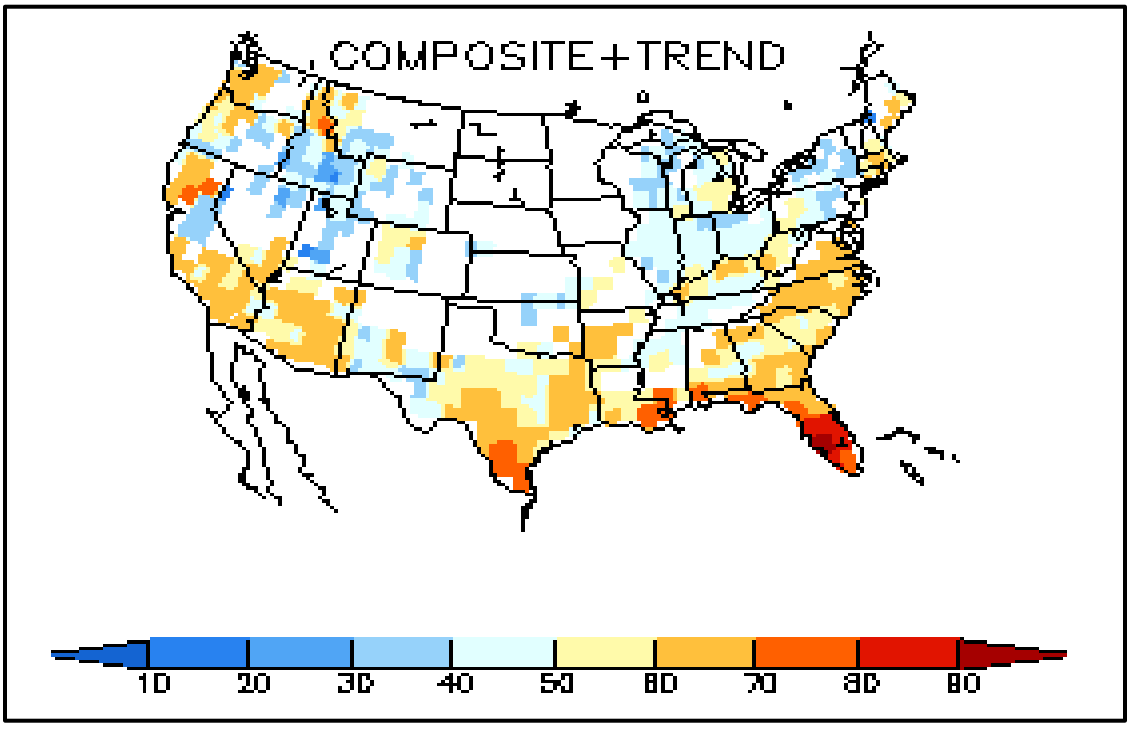

Figure 4. La Niña Precipitation Anomaly Frequency of Occurrence (%) for December-February.